RESTORING DEER CREEK:

BUILDING PARTNERSHIPS TO OVERCOME THE LEGACY OF THE GOLD RUSH ERA

Application #61

PART A – COVER PAGE

STATE WATER RESOURCES CONTROL BOARD
SFY 2002 Costa-Machado Water Act of 2000
CALFED Watershed Program

Application No. 61

PROJECT TITLE: **Restoring Deer Creek: Building Partnerships to Overcome the Legacy of the Gold Rush Era**

Project Region: Nevada — Indicate RWQCB #: 5
Multi-regional Project: ____ — Indicate RWQCB #s: ____
Statewide Project: ____

PROJECT DIRECTOR (one name only) (Ms., Mr., Dr.): **Mr. John van der Veen** — **June 6, 2002**
PRINT — DATE

LEAD APPLICANT OR ORGANIZATION: (one name only) **Friends of Deer Creek**

TYPE OF AGENCY:

Municipality		Local Agency		*Nonprofit (non-landowner)	X
Nonprofit (landowner)		Local Public Agency			

STREET ADDRESS: 132 Main Street
CITY: Nevada City — Zip Code: 95959
P.O. BOX: — Zip Code:
COUNTY: Nevada
STATE: California

PHONE NO.: 530-265-6090 — FAX NO.: 530-265-7130

E-MAIL ADDRESS: friendsofdc@sbcglobal.net — FEDERAL TAX ID. NO.: 61 — 68-0429132

PROJECT TYPE: **WATERSHED PROTECTION PROGRAM**

LEGISLATIVE INFORMATION

Senate District **01** Assembly District **03**

United States Congressional District **2nd**

CALFED, RWQCB, or SWRCB STAFF CONTACTED REGARDING THIS PROPOSAL:

Contact:	Lori Weber	Contact:	Lauma Jurkejics
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Dates contacted:	Ongoing	Dates contacted:	May 30,2002

PRIMARY COOPERATING ENTITIES:

Entity Name: Friends of Deer Creek
Role/Contribution to Project: Lead Agency
Contact Person: John van der Veen Phone No.: 530-265-6090
E-mail address: friendsofdc@sbcglobal.net

Entity Name: Natural Heritage Institute
Role/Contribution to Project: Project Management
Contact Person: Dr. Elizabeth Soderstrom Phone No.: 530-478-5694
E-mail address: esoderstrom@n-h-i.org

WATERBODY/WATERSHED (Include Catalog Number in Section 18 of the ARD): Deer Creek (sub watershed of the Lower Yuba River) 18020107

GPS COORDINATES FOR PROJECT LOCATION, IF AVAILABLE: 39°15N 121°01W

FISCAL SUMMARY:

Proposition 13 Funds Requested	$423,000
Other Project Funds	$163,000
Total Project Budget	$586,000

CERTIFICATION

Please read before signing.

I certify under penalty of perjury that the information I have entered on this application is true and complete to the best of my knowledge and that I am entitled to submit the application on behalf of the applicant (if the applicant is an entity/organization). I further understand that any false, incomplete, or incorrect statements may result in the disqualification of this application. By signing this application, I waive any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent provided in this RFP.

June 6, 2002

Applicant Signature Date

John van der Veen

Printed Name of Applicant

PART B – PROJECT NARRATIVE

PART B – RESTORING DEER CREEK: BUILDING PARTNERSHIPS TO OVERCOME THE LEGACY OF THE GOLD RUSH ERA

The **overall goal** of Restoring Deer Creek: Building Partnerships to Overcome the Legacy of the Gold Rush Era (The Restoring Deer Creek Project) is to create a model of how a rural community can develop a partnership that spans City and County government, Federal agencies, local nonprofit organizations, land owners, and educational and youth groups to turn a heavily degraded creek that flows through the center of a small town into a resource for aquatic organisms, for education, and for the direct benefit of the citizens of Nevada City.

Specific objectives include the following:

- To understand the natural and existing hydrology, geomorphology, and ecology of Deer Creek;
- To pinpoint water quality issues in the basin and improve water quality through targeted interventions;
- To restore riparian habitat and function to targeted river reaches; and
- To build "pride in place" and local capacity to manage this central and important resource.

The intent of this project is to provide an on-the-ground demonstration that although rivers can divide citizens and interest groups, they can also serve as a catalyst for cooperation and restoration. The project proponents intend to leverage the uniquely close cooperation that already exists in this watershed (between Friends of Deer Creek (FDC), Nevada City Council, Bureau of Land Management (BLM), riparian and upland landowners, Sierra College, Nevada Irrigation District (NID), Nevada County Department of Transportation and Sanitation, and other non-profit organizations) to meet the environmental, educational, water quality, recreational, and economic goals of the Nevada City community while contributing to the CALFED Goals and Objectives.

In Figure 1 below we graphically display the roles of the **project partners**. FDC, the fiscal agent of the project, will partner with Sierra Office of the Natural Heritage Institute (NHI) to manage and implement the project. In addition, the project will be supported by a range of other groups, departments and organizations. The Nevada City Council has fully endorsed this project (please see Letter of Support) and will work with the project to restore Little Deer Creek and to address issues of non-point source pollution into the creek from City roads and buildings. Likewise, the Nevada County Department of Transportation and Sanitation has encouraged the study on the Sanitation Facility upgrade. NID, which is responsible for the river operations through a series of reservoirs and ditches, will offer full cooperation (please see Letter of Support) to meet project goals. Further, Sierra College is working with project proponents to develop a Macroinvertebrate Identification Course to help train Deer Creek volunteers. Trash removal, river bank restoration and monitoring will occur in part on BLM land; BLM fully endorses the project (please see Letter of Support). Most of the riparian and upland landowners are already active members of Friends of Deer Creek and are enthusiastic about being involved in the proposed restoration (please see numerous Letters of Support from these landowners). Last but not least, the restoration of Deer Creek is in the hands of more than fifty active river volunteers who spend the hours in between their already full lives to work toward a vision that we all share for this river. Without doubt, this is **a broad-based stakeholder and landowner-driven community effort**.

Figure1. Project Partners

PROJECT MANAGEMENT & OVERALL IMPLEMENTATION RESPONSIBILITY:

Friends of Deer Creek (Lead Agency)

Natural Heritage Institute

IMPLEMENTING PARTNERS:

Nevada City
Riparian Landowners
Sierra College
BLM
Nevada Irrigation District
SYRCL
Nevada County: Dept of Transportation and Sanitation

SUPPORTING PROCESSES:

Stakeholder and Landowner-Driven CRMP Process

MOST IMPORTANT FACTOR:

The More than 50 Active Volunteers
That Form the Foundation
For the Deer Creek Restoration Effort

Location of Project. Deer Creek is the major tributary of the Lower Yuba River below Englebright Dam (see attached maps) with mixed snow- and rain-based hydrology. The overall effort to restore Deer Creek covers the entire drainage. The scope of the project, however, is limited to the area that has a direct impact on Nevada City, a rural financial hardship community. The maps indicate the location of specific project components and the location of the proposed project within the Basin.

Problem Statement. Rich deposits of gold were discovered in Deer Creek and the surrounding watershed in the late 1800's. As a result, Deer Creek was severely altered under the pressure of placer mining and gold digging, as well as water diversions and transfers that continue to feed a ditch and flume system today.[1] During the gold mine era, the excess sediment load from the hydraulic mining overwhelmed the capacity of the drainage to move that excess sediment in all but the most extreme rainfall years, leading to local aggradation of the sediment.

Following the cessation of hydraulic mining, the river incised and left behind much of this gold mining debris perched above the river. Today, this material is reworked and added to the sediment load of Deer Creek resulting in high sediment loads from upper Deer Creek, which not only impact the instream ecology of the creek, but also contribute to heavy sediment loads in the lower Yuba River threatening salmon and steelhead populations.[2] In addition, due to downcutting, Deer Creek suffers from eroding and unstable banks.

Further, mercury used to separate gold from sediment was lost during mining operations at an estimated rate of 10-30 percent. Much of this mercury remains in the sediment deposits as inorganic mercury. Preliminary assessment of mercury bioaccumulation in the northwestern Sierra Nevada indicate that Deer Creek is one of the watersheds most severely affected by hydraulic mining and mercury contamination (Slotten 1997). More recent studies in Deer Creek report elevated concentrations of mercury and methylmercury in streambed sediments and water samples (May etal,USGS 2000 report 00-37).

In addition to addressing concerns that stem from the legacy of the Gold Mine Era, this project is also focused on water quality concerns generated by the present-day inhabitants of Nevada City, such as the recurring failure of the municipal waste water treatment plant, and upper watershed activities that contribute to high bacteria and sediment loads in the creek.

Context of Proposal. Friends of Deer Creek was organized in 1995 by a group of local concerned citizens wishing to protect the watershed and to address issues of water quality in Deer Creek. From the beginning, FDC worked closely with the City of Nevada City on several restoration projects acting as environmental oversight agents, and assisted the County Department of Transportation and Sanitation in monitoring mitigation for their road works. In addition, FDC partnered with NID on the initial analysis of storm water runoff into the Creek. Through a Proposition 204 grant, Friends of Deer Creek was able to hire a River Scientist to coordinate the scientific study of the water quality of the creek. A citizen-based monitoring program was initiated in December 2000. Today, trained volunteers conduct monthly chemical and biological monitoring at fifteen sites along Deer Creek and its tributaries. The monitoring program operates under a Quality Assurance Project Plan (QAPP) approved by the SWRCB and the Yuba Watershed Council.

Early results from this monitoring work indicate high pH levels and associated algal blooms and fish kills in summer months in the mainstem of Deer Creek. In addition at the site of an old mine ore processing plant on Gold Run, a tributary to Deer Creek, arsenic has been found in levels up to 30 parts/billion. Accelerated development in the watershed is also considered a source of high sediment loads to the Creek.

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[1] Water is diverted through a canal & tunnel system from the South Yuba River into the Deer Creek watershed.
[2] The Yuba River is one of the most important watersheds that feeds the Sacramento River, sheltering the last remaining wild run of threatened Central Valley steelhead, as well as sizeable wild runs of endangered spring- and fall-run Chinook salmon.

In early 2000, Friends of Deer Creek realized that a planning process was needed and began to facilitate federal, state, county and city agencies, landowners, and interested citizens to develop a Coordinated Resource Management Plan (CRMP) including historical information, current assessments and future goals for the health of the Deer Creek watershed. The final draft of the CRMP will be available in June 2003. **The Restoring Deer Creek Project is a three-year project that includes assessments and activities that have emerged as early, priority actions from this multi-stakeholder CRMP process.**

Linked to Other Efforts. In addition to being integral to a CRMP process, the Restoring Deer Creek Project is also linked to other efforts in the greater Yuba Watershed. For example, Friends of Deer Creek is a founding organization and active member of the Yuba Watershed Council, which coordinates activities in the Yuba Basin. Project proponents have had extensive conversations associated with coordinating the Restoration of Deer Creek Project with work being proposed by the South Yuba Citizens League (SYCL) under Proposal # 77: Yuba River Water Quality Monitoring Program, Phase II. It is clear that these two projects will benefit each other (through data sharing, analysis and reporting) and there are no redundancies between the two. In addition, the proponents of Proposal #226, the Nevada County Planning Department, has asked FDC to undertake the water quality monitoring for the proposed Pond Restoration, if funded.

Expected Results. Nevada County is a rapidly growing region of the Sierra Nevada (>17% population increase since 1990) with much of the growth occurring in or around Nevada City. This project will directly benefit Nevada City and its citizens in the following ways: 1) increasing water quality in the creek by pinpointing and reducing sources of pollution; 2) assessing appropriate and innovative methods to upgrade the municipal water supply; 3) restoring sections of the Creek for recreational access and instream ecological benefit; and 4) providing opportunities for the city to more fully capitalize on a valuable resource that flows through the downtown area to help ensure the economic vitality of the town. In addition, we expect that this project will provide benefit to other small rural communities that are undertaking restoration and water quality projects by providing a model of how to build partnerships and community to solve existing and inherited resource problems.

Technology Transfer. This project will expand its website so that the assessments, water quality monitoring, and restoration efforts are readily available to a wide range of people. In addition, the project will research methods to make data presentation and analysis compatible with other CALFED watershed programs so that information on the Deer Creek scale can be scaled-up to the larger CALFED effort. Further, project proponents will develop a presentation that articulates project successes and lessons-learned (both in terms of technical information and in terms of collaborative processes) and will actively seek venues to share this information.

Furthering CALFED Goals. In order to adequately address the question of how this proposal addresses the various CALFED priorities, objectives and goals, we prepared a matrix (Table 1) that outlines the steps that the Restoring Deer Creek takes towards furthering CALFED's goals and objectives, including information on whether the project contributes directly or indirectly and through which specific tasks. The goals and objectives that are met most closely by this project are highlighted in red, starred and discussed in the comment section of the Table.

Table 1: Relation to CALFED Goals and Objectives

	Task #	Comments
CALFED BAY-DELTA PROGRAM GOALS		
* 1.Provide good water quality for all beneficial uses	4,5,6	Sediment is considered a pollutant in the Bay-Delta system. The source of the sediment is often unknown, but at least a portion can be attributed to increased grading, erosion and development in Sierra foothill communities, such as Nevada City. One main aim of this Project is to limit sediment and mercury-laden sediment entering the Bay-Delta system.
2. Improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta	5,6	
3. Reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses	NA	
4. Reduce the risk from catastrophic breaching of Delta levees	NA	
CALFED ERP STRATEGIC GOALS & OBJECTIVES		
1. Recovery of at-risk species and native biotic communities	5	
2. Rehabilitate ecological process in the Bay-Delta estuary and its watershed	5,6	
3. Maintain or enhance populations of harvest species	NA	
4. Protect and restore functional habitat types in the Bay-Delta estuary and its watershed	6	
5. Prevent the establishment of additional non-native invasive species	6	
* 6. Improve and/or maintain water and sediment quality conditions that support healthy and diverse aquatic ecosystems	4,5,6	This project is aimed at developing a healthy sediment balance in Deer Creek and improving water quality through science-based decision-making.
WATERSHED PROGRAM INITIAL PRIORITIES		
* 1. Build community capacity to assess and effectively manage watersheds that affect the Bay-Delta system	4-7	This is a grassroots project that directly involves civil society and a community-based organization in defining and solving their river problems providing benefit to them and to the downstream Bay-Delta.
* 2. Develop watershed assessments and management plans	4,5,6	This project will inform the on-going CRMP process for Deer Creek in the development and implementation of the management plan for Deer Creek.
* 3. Implement specific watershed conservation, maintenance and restoration actions identified in existing watershed plans	5,6	The assessments and restoration activities identified in this project have been identified through the CRMP process as early-action needs.
WATERSHED PROGRAM PRIMARY 0BJECTIVES		
* A. Facilitate coordination and collaboration among government agencies, other organizations, and local watershed groups	7	The Restoring Deer Creek project is a model of collaboration among federal, local, and non-profit organizations
* B. Develop watershed monitoring and assessment protocols	5	One goal of this project is to expand the monitoring program to include new monitoring protocols for sediment and stream geomorphology
* C. Support education and outreach	7	Outreach and education are integral components of every step of this project.

	Task #	Comments
		Studies and data results will be reported in a user-friendly way, and the project will continue to train citizen river monitors in the full range of monitoring parameters.
D. Integrate Watershed Program and other CALFED program elements	NA	
WATERSHED PROGRAM DESIRED OUTCOMES		
* 1.1 Collaboration between public and private parties	4-7	Local riparian and upland landowners form the foundation of the volunteers who will contribute their time to this restoration effort. In addition, this work will continue to provide a forum for private landowners and public decision-makers to engage in collaborative discussions about the shared future of Deer Creek.
* 2. Development of Monitoring Protocols and Application of Adaptive Management Process	4	This project intends to work closely with CALFED proposal #563: Small is Beautiful: Scaling Adaptive Management to Restoration Projects (if funded) to develop an adaptive management plan that is appropriate for smaller-scale restoration efforts such as this one.
* 2.1 Watershed assessment	4	This project involves several activities that contribute to an overall watershed assessment including, a sediment study and an assessment of the relation between historical and existing flows. These assessments will then form the basis of the restoration plan.
* 2.2 Watershed monitoring	4	This project will expand the existing and successful citizen-based monitoring program to include several new stations and parameters including flow, sediment, and geomorphic characteristics of the river
* 2.3 Effective watershed plan implementation	5,6	The assessments and restoration activities identified in this project have been identified through the CRMP process as early-action needs and will be implemented as part of this proposal.
*3. Improve and Expand Watershed Education and Public Outreach	7	Outreach and education are integral components of every step of this project. Studies and data results will be reported in a user-friendly way, and the project will continue to train citizen river monitors in the full range of monitoring parameters in collaboration with Sierra College.
*3.1 Informed citizenry	7	
*3.2 Sustainable watershed programs	7	Through the development of a Business Plan and through seeking additional funding as part of this project, the Restoring Deer Creek Project will take significant steps towards being a self-sustaining effort.
4. Maximization of the Multiple Benefits of Common Programs	NA	
*5. Improved Watershed Stewardship	4-7	By removing trash, vehicles and tires from the river channel and floodplain, Deer Creek will begin to emerge as a more important resource in the eyes of the community. Through these actions and the other restoration and water

	Task #	Comments
		quality improvement elements in the project, more and more people in the community will develop a sense of pride in their river and move into a stewardship role.
5.1 Improved watershed ecosystem maintenance and enhancement	6	This project will pinpoint sources of pollution in the upper watershed and through storm drain infiltration systems, options for the upgrade of the Sanitation Facility, and stabilizing eroding banks will improve ecosystem maintenance in the watershed.
5.2 Improved Watershed Planning and Management	4	The assessments and monitoring work proposed in this project are basic elements for successful watershed planning and management.

In addition, the Restoring Deer Creek Project meets all of the **CALFED Watershed Program Principles**; the Project is community-based, involves the development and use of monitoring protocols, increases learning and awareness among civil society in the watershed, as well as among other watershed collaborators. The project promotes collaboration between a range of stakeholders and management entities, it address multiple watershed issues including water quality and habitat issues, and it is coordinated and supported at multiple levels from the grassroots through local government and up to federal agencies. In addition, through the development of a Business Plan and fund raising efforts, the project provides for ongoing implementation.

Lastly, the Restoring Deer Creek Project meets the CALFED Bay-Delta Program Implementation Commitments in that it supports local leadership, involves significant stakeholder consultation, will comply with existing water rights, and involves science-based adaptive management. Further, the Project involves no land acquisition.

Part C – PROPOSED SCOPE OF WORK

6. BACKGROUND AND GOALS:

Having been severely impacted by hydraulic mining during the Gold Rush Era and then largely neglected for the entire 20th century, Deer Creek in Nevada County is now under the stewardship of a rural coalition that includes Friends of Deer Creek, Nevada City, the Bureau of Land Management, Natural Heritage Institute, Yuba Watershed Council, Nevada Irrigation District, Nevada County Land Trust, and private landowners. The overall intent of this coalition is to develop a model for restoration of a river that flows through the center of a small Gold Country town.

Friends of Deer Creek has initiated a successful citizen-based water quality monitoring program (including a Quality Assurance Project Plan), and a CRMP planning process. Restoring Deer Creek is a three-year project that includes assessments and activities that have emerged as early, priority actions from this multi-stakeholder CRMP process. Restoring Deer Creek builds on the existing effort with three major components: 1) understanding the river and connecting river monitoring to land management issues; 2) reducing point and non-point source inputs to the stream; and 3) restoring targeted river reaches. These three interwoven project components are described in more detail below.

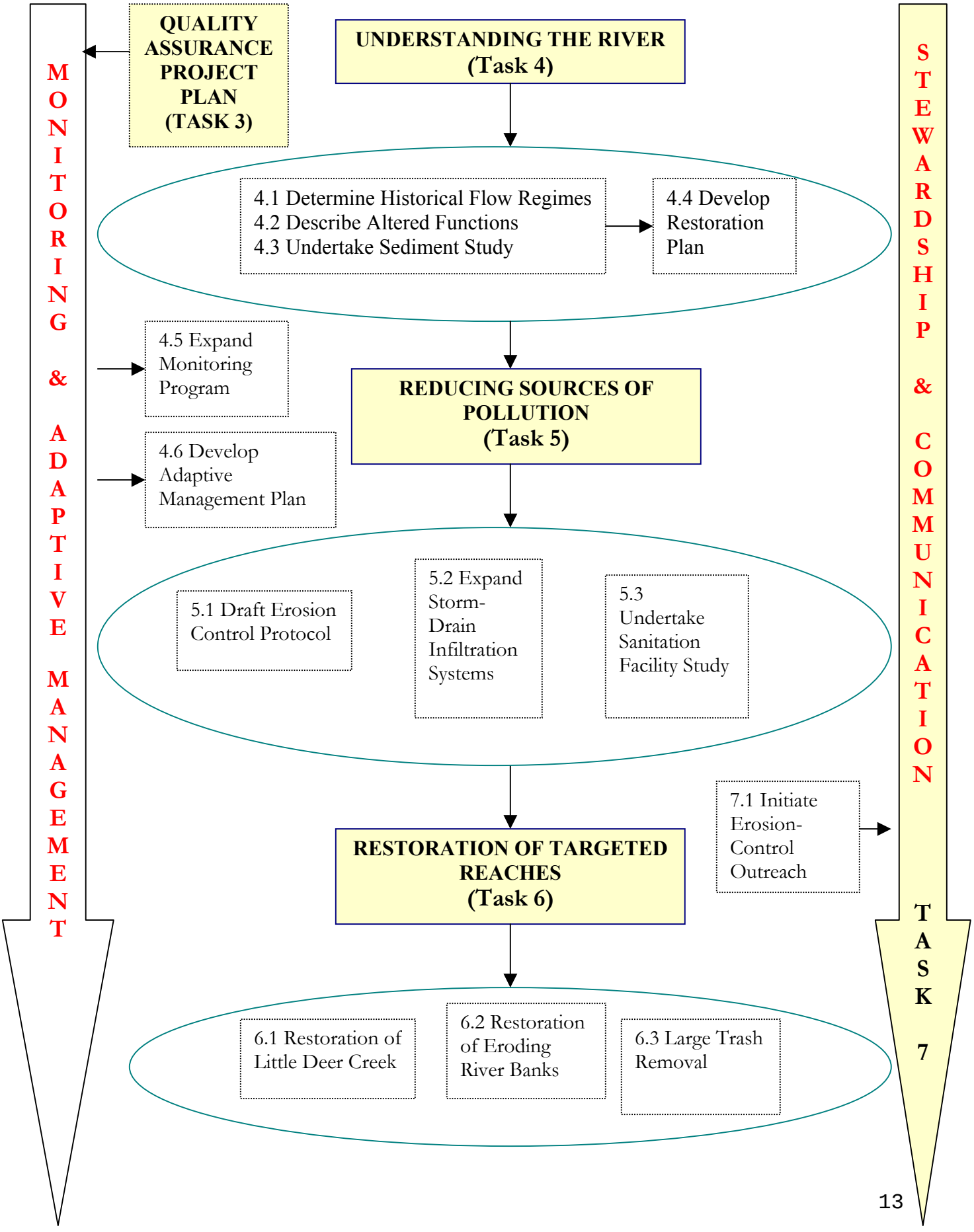
Nevada County is a rapidly growing region of the Sierra Nevada (>17% population increase since 1990) with much of the growth occurring in or around Nevada City. This project will directly benefit Nevada City and its citizens in the following ways: 1) increasing water quality in the creek by pinpointing and reducing sources of pollution; 2) assessing appropriate and innovative methods to upgrade the municipal water supply; 3) restoring sections of the Creek for recreational access and instream ecological benefit; and 4) providing opportunities for

the city to more fully capitalize on a valuable resource that flows through the downtown area to help ensure the economic vitality of the town. In addition, we expect that this project will provide benefit to other small rural communities that are undertaking restoration and water quality projects by providing a model of how to build partnerships and community to solve existing and inherited resource problems.

The **overall goal** of Restoring Deer Creek is to create a model of how a rural community can develop a partnership that spans city and county government, federal agencies, local nonprofit organizations, land owners, and educational and youth groups to turn a heavily degraded creek that flows through the center of a small town into a resource for aquatic organisms, for education, and for the direct benefit of the citizens of Nevada City.

Specific objectives include the following:

- To understand the natural and existing hydrology, geomorphology, and ecology of Deer Creek;
- To pinpoint water quality issues in the basin, and improve water quality through targeted interventions;
- To restore riparian habitat and function to targeted river reaches; and
- To build local capacity to manage this central and important resource.


MONITORING & ADAPTIVE MANAGEMENT
QUALITY ASSURANCE PROJECT PLAN (TASK 3)
UNDERSTANDING THE RIVER (Task 4)
4.1 Determine Historical Flow Regimes
4.2 Describe Altered Functions
4.3 Undertake Sediment Study
4.4 Develop Restoration Plan
4.5 Expand Monitoring Program
4.6 Develop Adaptive Management Plan
REDUCING SOURCES OF POLLUTION (Task 5)
5.1 Draft Erosion Control Protocol
5.2 Expand Storm-Drain Infiltration Systems
5.3 Undertake Sanitation Facility Study
RESTORATION OF TARGETED REACHES (Task 6)
6.1 Restoration of Little Deer Creek
6.2 Restoration of Eroding River Banks
6.3 Large Trash Removal
7.1 Initiate Erosion-Control Outreach
STEWARDSHIP & COMMUNICATION
TASK 7

2. PROPOSED WORK TO BE PERFORMED

In the diagram above, the proposed work to be performed is illustrated. The intent of this diagram is to graphically demonstrate the following two points. First, the analytical work and studies will provide a backbone for science-based restoration, and for City and County land and water management decisions. These are targeted studies that will generate essential information needed to move ahead with restoration and management of the river.

Second, this diagram illustrates that both the monitoring and adaptive management work and the stewardship and communication elements of the project will be on-going throughout the life of the project and beyond. We do not envision these two areas as discrete tasks, but rather as features of the project that are integral to every task.

Task 3: Quality Assurance Project Plan (QAPP)

3.1 QAPP Approval: Friends of Deer Creek have an approved QAPP under Prop. 204 for their base line data citizen-monitoring program. The QAPP will be amended to include stream profiling, flow and morphology data.

3.2 Technical Advisory Committee: A TAC was formed to analyze and approve Prop 204 citizen monitoring data. This project will support continued TAC meetings to analyze and approve additional monitoring data, analysis, studies and the restoration and adaptive management plan.

Task 3 Deliverables:

- Amended QAPP to include stream profiling, flow and morphology data (3.1).
- Quarterly minutes to TAC meetings.

Task 4: Understanding the River. This component of the project is to ensure that the restoration actions are science-based and are destined to be sustainable and lead to restoration goals.

4.1 Determine Historical Hydrology/Geomorphology of the River. From historical records, photographs and comparison with nearby rivers, this element of the project will build an understanding of Upper Deer Creek that describes the pre-mining flow regime, sediment transport, riparian vegetation, channel characteristics, temperature profiles, and aquatic habitat.

Success Criteria = Improved knowledge of the natural functioning of Deer Creek by CRMP members, Nevada Irrigation District, and Nevada City
Measurement = Number of individuals that attend small group meetings and public meetings where results are presented

4.2 Compare Existing Flow Regime with Natural Flows. In this element of the project, we will compare the ideal conditions characterized in the subtask 4.1 with the existing conditions on Upper Deer Creek. This comparison will allow us to understand in very specific physical and biological terms the alterations in the river flow and function due to the legacy of the Gold Mine Era and existing river operations.

Success Criteria = Improved knowledge of the gap between the natural functioning of the river and the existing function
Measurement = Number of individuals that attend small group meetings and public meetings where results are presented

4.3 Undertake Sediment Study: This subtask addresses the issue of high sediment loads in the Basin. The study will consist of a field survey to determine major sources of erosion and deposition in the Upper Basin and will build on information gleaned in the historical analysis conducted in Task 4.1.

Success Criteria = Identification of major sources of sediment input to the Upper Basin
Measurement = Sediment field survey and study completed

4.4 Develop Restoration Plan. From the analysis described above, we will develop restoration goals that either take steps towards restoring the Creek towards its original state, and/or stabilize the existing conditions in a way that maximizes habitat value and water quality.

Success Criteria = Restoration goals established for Upper Deer Creek based on knowledge acquired in previous two subtasks
Measurement = Restoration Plan adopted by CRMP

4.5 Continue and Expand Monitoring Program: Building on a successful citizen's monitoring program, the existing monitoring program will be expanded to include five more stations (for a total of twenty) to accurately pinpoint location and timing of pollution from developments and from Nevada City itself. In addition, ten cross sections and longitudinal profiles will be established along Upper Deer Creek to set benchmarks for the restoration work. Lastly, at each of the monitoring sites flow data and suspended sediment will now be collected. This water quality monitoring program will be conducted according to the approved monitoring plan developed in Task 3.

Success Criteria = Presence of an accurate monitoring program to track trend and restoration impact
Measurement = Accurate and on-going data collected, analyzed, and reported

4.6: Water Quality Sampling: Conduct water quality sampling according to the approved monitoring plan developed in Task 3.

4.7 Develop Adaptive Management Plan: This component of the project will involve the development of a conceptual model that outlines our understanding of the major processes and functions of the Upper Basin and will involve potentially designing the restoration actions as management interventions to reduce uncertainty around one or two key assumptions. The monitoring program will be coordinated with the adaptive management plan and project partners hope to get assistance from CALFED Watershed Program Application #61: Small is Beautiful – Scaling Adaptive Management to Restoration Projects.

Success Criteria = Accurate and successful project adjustments based on an adaptive management plan
Measurement = Adaptive management plan developed and implemented

Task 4 Deliverables:

- Report on Past and Present Hydrologic and Geomorphologic Patterns (4.1 and 4.2)
- Finalized Sediment Study (4.3)
- Restoration Plan (4.4)
- Landowner Agreements for access to new sites (4.5)
- Revised Training Materials to reflect new monitoring components (4.5)
- Monthly Water Quality Data Reporting Sheet (4.5)
- Quarterly TAC Review and Reports (4.5)
- Adaptive Management Plan (4.6)
- Regular Web site postings (4.1 – 4.6)

Task 5: Reducing Sources of Pollution. The actions outlined below have been identified through the CRMP process as actions that are in immediate need of attention to begin the restoration of Upper Deer Creek.

5.1 Draft Erosion Control Protocol: The project will work with the Nevada City Council, the Nevada County Department of Sanitation and Transportation, and the Deer Creek CRMP Group to draft erosion-control protocols. New ordinances for adoption by the City Council also will be explored to reduce sediment load caused by new or remodel home construction.

Success Criteria = Reduced sediment input to the stream from road building, or new or remodel home construction
Measurement = Decreased sediment load to Deer Creek measured through expanded monitoring program

5.2 Expand Storm Drain Infiltration System: This element of the project will involve expanding tested storm drain traps (from Prop 204 project results) to ten new sites within the city collecting sediment in areas identified as major contributors to the load entering Deer Creek or its tributaries as identified in Task 4.3.
Success Criteria = Increase in the quality of stormwater runoff from Nevada City to Deer Creek
Measurement = Significant increase in water quality downstream of Nevada City during storm events

5.3 Undertake Sanitation Facility Study: To upgrade the existing facility to include tertiary treatment and to meet new state regulatory requirement, this subtask will involve an assessment in consultation with the Nevada City Sanitation District of existing and projected loads to the facility. The study will also include research on alternative and cost-effective means to treat the effluent from the facility, including the use of a wetland infiltration system.
Success Criteria = Best upgrade alternative identified for Nevada City Sanitation Facility
Measurement = Report identifies a range of innovative and cost-effective actions for upgrade

Task 5 Deliverables:

- Erosion Control Protocols with City of Nevada City and Nevada County (5.1)
- Installation of New Storm Drain Traps (5.2)
- Feasibility Study for Sanitation Facility (5.3)

Task 6: Restoration of Targeted Reaches. After identifying the major sources of erosion in Task 4, this project will reduce erosion problems using soil-bioengineering solutions where appropriate. In addition, it will implement priority restoration activities, including those that will restore and enhance stream functions and fish habitat and that will revegetate denuded areas within the riparian corridor, providing habitat for migratory and resident songbirds, amphibians, and other wildlife.

6.1 Restoration of Little Deer Creek: This project will assist an on-going project aimed at restoration of Little Deer Creek, located in Pioneer Park, Nevada City. Relocation and redesign of an existing footbridge not previously identified, as part of the restoration project is included in this grant application. Hydrologic engineers have determined relocation of the bridge will prevent flooding which has been prevalent during most heavy storm events (10 year storms).

Success Criteria = Little Deer Creek in Pioneer Park restored to natural condition
Measurement = Design criteria for project met

6.2 Restoration of Eroding River Banks: To reduce mercury-laden sediments to the stream, this project will implement several obvious streambank revegetation and stabilization projects to stop down cutting

and eradicate noxious weeds, and to reduce soil erosion and sedimentation of surface waters in the Upper Deer Creek Watershed.

Success Criteria = Major exposed, eroding banks stabilized along Upper Deer Creek
Measurement = Decreased sediment input to Deer Creek below restoration projects

6.3 Large Trash Removal: Pride in place is a powerful impulse and an essential ingredient in engaging communities in successful restoration efforts. In order to develop that sense of pride in place and stewardship, the project will work to remove trash and large obstacles in the floodplain, such as abandoned vehicles and tires.

Success Criteria = Improved watershed stewardship along Upper Deer Creek
Measurement = Decreased trash input to the Creek

Task 6 Deliverables:

- Restoration of 2000 feet of Little Deer Creek in Pioneer Park to a natural meandering stream channel (6.1)
- Redesign of foot bridge (6.1)
- Construct redesigned Bridge (6.1)
- Photomonitoring Documentation (6.1)
- Three sections of severely eroded streambank stabilized (6.2)
- Sediment improvement will be documented by monitoring data and communicated to restoration teams (6.2)
- Removal of three vehicles in stream channel (6.3)
- Removal of tires and other large trash from stream channel and riparian zone (6.3)

Task 7: Stewardship and Communication. The Deer Creek watershed is highly attractive to new development and increased urbanization because of its natural beauty and historical significance. It is increasingly important that each member of the community realize their impact to the environment. Many if not most members of the community have very little information on how every day activities can impact negatively on the watershed. Placing lawns next to creeks or drainages with heavy fertilization is an example. The findings of the restoration, demonstration activities and monitoring results need to be shared with the community in a way that it is readily assessable and understood.

7.1 Conduct Public and Small Group Meetings: The focus of these meetings would be to report results and solicit feedback on the outputs of the project.

Success Criteria = Increase in active participation by stakeholders in restoring Deer Creek
Measurement = Number of active members in Friends of Deer Creek

7.2 Initiate Erosion Control Outreach: In addition to drafting erosion control protocols to be formally adopted by the Nevada City Council, the project will develop a brochure and other outreach material for distribution to riparian and upland landowners, construction companies, real estate agents and to developers. The intent of this activity is to educate property owners, etc., about non-point source pollution with the goal of addressing known water quality impairments.

Success Criteria = Decrease in input to Deer Creek from homeowner and development projects
Measurement = Sediment load decreased below road and home development projects as measured by monitoring program

7.3 Application to Management Issues: The information collected in this project will be communicated broadly through an internet-based data system and will be used by the Nevada City Council and the Deer Creek CRMP Group to form the basis of land and water management policies.

Success Criteria = Land and water management decision makers using information generated from this project in decision-making processes
Measurement = Qualitative analysis of decision-making processes

7.4 Technical Information Transfer/City Partnership: One of the goals of the Deer Creek CRMP is to share data and lessons learned from monitoring, restorations, demonstration projects and feasibility studies. Small cities such as Nevada City need community based citizens groups to partner with them to evaluate data and technical reports. Sediment and heavy metal contamination need to be addressed in their planning and zoning decisions. Attending and holding conferences with other groups studying similar problems or having similar projects would be a teaching and learning activity by which to improve future projects. Public partnerships can be used to inform and change policies around watershed issues like storm water contamination, grading and road maintenance activities, citizen involvement, etc..

Success Criteria = improved watershed understanding by public officials and the scientific community.
Measurement = Improved public policy by city and county actions. Improved scientific understanding as demonstrated at scientific meetings and prepared reports.

7.5 Secure Future Funding: In order to ensure the long-term sustainability of this project, the project partners will develop a medium range business plan that includes staffing requirements, revenue generation, and funding opportunities. In addition, project partners will apply for all available additional grants over the life of the project.

Success Criteria = Making sure that the restoring Deer Creek project is sustainable over a 15-year time frame
Measurement = Business Plan implemented

Task 7 Deliverables:

- Hold regular small group meetings to disseminate data to community and restoration groups (7.1, 7.4)
- Friends of Deer Creek membership to increase by more than 100 members during the grant period. (7.1)
- Identify stakeholders (construction contractors, landowners, real estate personnel, developers, planning and governmental employees, service groups, etc.) needing information and place on the database. (7.1 & 7.2)
- Develop and disseminate Brochure (7.2)
- Collect, review and disseminate sediment data. (7.2, 7.4)
- Implement management plan recommendations (7.3)
- Regularly attend CALFED meetings to learn about and share successes and lessons learned. (7.4)
- List of changes in public policy by city and county actions. (7.4)
- Submit four grant applications during grant period (7.5)
- Develop and implement Business Plan for long term sustainability of restoration efforts (7.5)

3. **TARGET COMPLETION DATES**

Task No. Deliverables	Target Completion Dates
Task 1: Project Administration	
1.2 Quarterly/Monthly Progress Reports	Beginning after 1st month of award
1.5 Contract Summary Form	Completed within 3 months of contract execution
1.6 List of subcontracted tasks, Good Faith Effort documents, quarterly/monthly Utilization Reports	
1.7 Subcontractor Documentation	
1.8 Expenditure/Invoice Projections	
1.9 Project Survey Form	Complete prior to final payment and at the end of the project
Task 2: CEQA/NEPA Documents and Permits	
2.1 CEQA/NEPA Documentation	Restoration Little Deer Creek Submitted expected Approval July, 2002: Deer Creek Restoration July, 2003
2.2 Permits	As required
Task 3: Quality Assurance Project Plan	
3.1 QAPP Approval	Prop. 204 QAPP is currently approved.
3.2 Amend QAPP to include additional measurements.	3 months from award execution
Task 4: Understanding the River	
4.1 and 4.2 Report on Past and Present Hydrologic and Geomorphologic Patterns	18 months from award execution
4.2 List of public attending meetings	One month from final approved report
4.3 Finalized Sediment Study	24 months from award execution
4.4 Restoration Plan	10 months from award execution
4.5 Landowner Agreements for access to new sites	3 months from award execution
4.5 Revised Training Materials to reflect new monitoring components	3 months from award execution
4.5 Monthly Water Quality Data Reporting Sheet	Monthly from award execution
4.5 Quarterly TAC Review and Reports	Quarterly from award execution
4.6 Adaptive Management Plan	
4.7 Regular (Quarterly) Web site postings	Quarterly from award execution
Task 5: Reducing Sources of Pollution	
5.1 Erosion Control Protocols	12 months from award execution
5.2 Installation of New Storm Drain Traps	24 months from award execution
5.3 Feasibility Study for Sanitation Facility	32 months from award execution

Task 6: Restoration of Targeted Reaches	
6.1 Restoration of 2000 of Little Deer Creek in Pioneer Park to a natural meandering stream channel	24 months from award execution
6.1 Redesign foot bridge	6 months from award execution
6.1 Construct redesigned foot bridge	18 months from award execution
6.1 Photomonitoring documentation report	Ongoing from 1st month from award execution
6.2 Three sections of severely eroded streambank stabilized	28 months from award execution
6.2 Dissemination of monitoring data	12,24,36+months from award execution
6.3 Removal of three vehicles in stream channel	10 months from award execution
6.3 Removal of tires and other large trash from stream channel and riparian zone	24 month from award execution
Task 7: Stewardship and Communications	
7.1 & 7.4 Conduct regular meetings to disseminate approved data	Semi annual meetings 6 mo. from award execution
7.1 Increase in Friends of Deer Creek membership	34 months from award execution
7.1 & 7.2 Database of identified stakeholders	8 months from award execution
7.2 Develop & disseminate brochure	10 months & ongoing from award date
7.2 & 7.4 Actively used internet site reporting information on Deer Creek	Quarterly from award execution
7.3 Implement management plan recommendations	Regularly 12 months from award execution
7.4 List public policy changes	34 months from award execution
7.4 Attend CALFED and other watershed meetings @ a minimum of 8/year	2 months from award execution
7.5 Submit f4 grant applications	8, 10, 16, 25 months from award execution
7.5 Develop & implement Business Plan for long-term sustainability of restoration effort	28 months from award execution
Task 8: Draft and Final Reports	
#.1 Draft Report	Complete two months before end of contract
#.2 Final Report	Complete one month before end of contract

PART D1 – BUDGET SUMMARY SHEET – TASK BUDGET BREAKDOWN (Parts D1 and D2 combined not to exceed 2 pages)

	Proposition 13 Funds	Other Project Funds	Total Budget
1. Task 1 – Project Administration	$ 60,000	$ 25,000	$ 85,000
2. Task 2 – CEQA/NEPA Documents and Permits	6,000	4,000	10,000
3. Task 3 – Quality Assurance Project Plan	3,000	5,000	8,000
4. Task 4 – Understanding the River	107,000	30,000	137,000
5. Task 5 – Reducing Sources of Pollution	120,000	50,000	170,000
6. Task 6 – Restoration of Target Reaches	102,000	40,000	142,000
7. Task 7 – Outreach & Communications	20,000	9,000	29,000
8. Task 8 – Draft and Final Reports	5,000	0	5,000
TOTAL BUDGET	$ 423,000	$ 163,000	$ 586,000

PART D2 – BUDGET SUMMARY SHEET – LINE ITEM Budget (Parts D1 and D2 combined not to exceed 2 pages)

	Proposition 13 Funds	Other Project Funds	Total Budget
1. Personnel Services	$ 235,000	$ 50,000	$ 285,000
2. Operating Expenses	45,500	13,000	58,500
3. Property Acquisitions			
a. Equipment	10,500	-	10,500
b. Furniture	1,000	-	1,000
c. Portable assets	-	-	-
d. Electronic data software/hardware	10,000	-	10,000
e. Processing equipment	-	-	-
f. Miscellaneous	-	-	-
4. Professional and Consultant Services	45,000	40,000	85,000
5. Contract Laboratory Services	25,000	5,000	30,000
7. Construction Expenses	9,000	40,000	49,000
8. General Overhead	41,800	15,000	56,800
8. TOTAL BUDGET	423,000	163,000	586,000

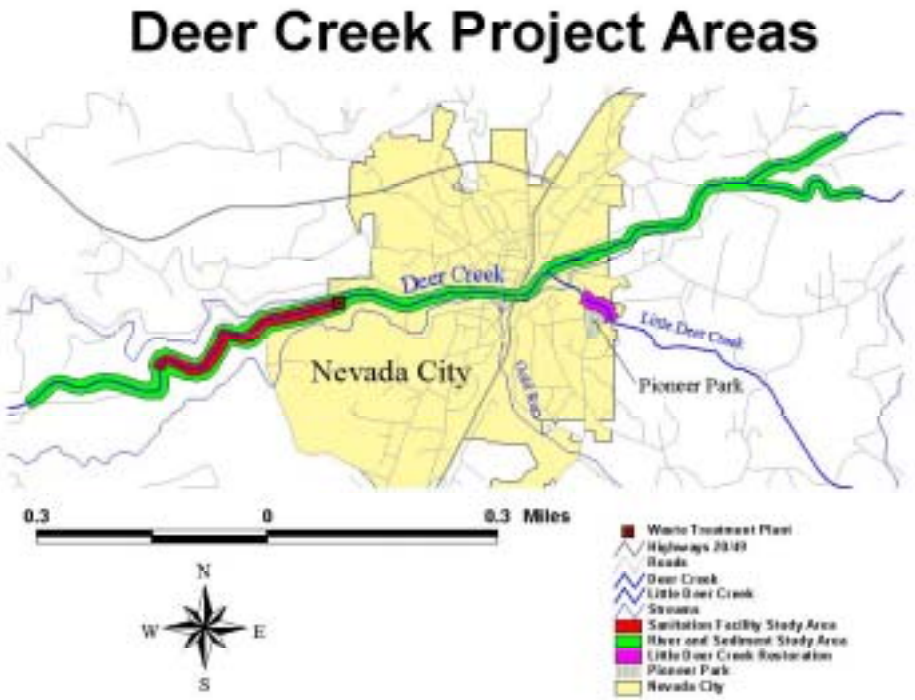
9. Describe the source and nature of the matching funds.

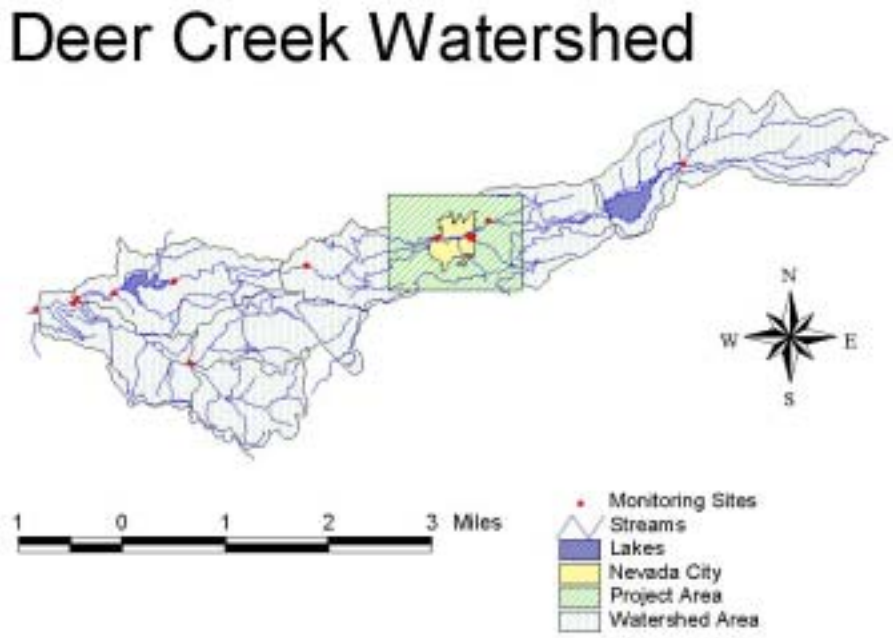
Friends of Deer Creek and the Nevada City in-kind contribution equals $85,000 and $ 78,000 are available from Prop 204 Project funds.

10. Advance Payment:

Friends of Deer Creek would like to have an advance payment of $60,000 (~14%) for cask flow consideration in continuing its ongoing monitoring and reporting activities.

PART E – PROJECT MAP





PART F – ENVIRONMENTAL INFORMATION FORM

NEPA/CEQA

1. Will this project require compliance with CEQA, NEPA, or both? Yes_X___No_____

2. If you checked "no" to question 1, please explain why compliance is not required for the actions in this proposal.

3. If the project will require CEQA and/or NEPA compliance, identify the lead agency(ies).

CEQA Lead Agency	City of Nevada City
NEPA Lead Agency	

4. Please check which type of document will be prepared.

CEQA		NEPA	
Categorical Exemption		Categorical Exclusion	
Initial Study	X	Environmental Assessment/FONSI	
Environmental Impact Report		Environment Impact Statement	

If you anticipate relying on either or both the Categorical Exemption or Categorical Exclusion for this project, please specifically identify the exemption and/or exclusion that covers this project. (Example: Fish and Wildlife Service Manual at 516 DM 6 Appendix 1.4 Categorical Exclusions Section B Resources Management: (1) Research, inventory, and information collection activities directly related to the conservation of fish and wildlife resources.)

5. If the CEQA/NEPA process is not complete, please describe the estimated timelines and cost for the process and the expected date of completion.

6. If the CEQA/NEPA document has been completed:

What is the name of the document? Naturalization of Little Deer Creek in Pioneer park, Nevada City, CA_

Please attach a copy of the CEQA/NEPA document cover page to the application.
See under supporting docs.

Please indicate what permits or other approvals may be required for the activities contained in your proposal and which have already been obtained. Please check all that apply.

LOCAL PERMITS AND APPROVALS	Needed?	Obtained?
Conditional use permit		
Variance		
Subdivision Map Act		
Grading permit		
General plan or Local Coastal Program amendment		
Specific plan approval		
Rezone		
Williamson Act Contract cancellation		
Local Coastal Development Permit		
Other		
STATE PERMITS AND APPROVALS	Needed?	Obtained?
Scientific collecting permit	X	X
CESA compliance: 2081		
CESA compliance: NCCP		
1601/03		
CWA 401 certification		
Coastal development permit		
Reclamation Board approval		
Notification of DPC or BCDC		
Other		
FEDERAL PERMITS AND APPROVALS	Needed?	Obtained?
ESA compliance Section 7 consultation		
ESA compliance Section 10 permit		
Rivers and Harbors Act		
CWA 404		

Other		
PERMISSION TO ACCESS PROPERTY		
Permission to access city, county or other local agency land. If "yes," indicate the name of the agency: City of Nevada City	Yes	Yes
Permission to access State land. If "yes," indicate the name of the agency: _____	No	
Permission to access federal land. If "yes," indicate the name of the agency: BLM	Yes	No
Permission to access private land. If "yes," indicate the name of the landowner (if multiple landowners, indicate how many individuals will be involved and what percentage have already granted permission: 25 100%	Yes	Yes

PART G – LAND USE QUESTIONNAIRE

1. Do the actions in the proposal involve construction or physical changes in the land use? Yes__X_ No____

If you answered "yes" to # 1, describe what actions will occur on the land involved in the proposal.
Relocation of bridge in Pioneer Park to prevent flooding.
If you answered "no" to # 1, explain what type of actions are involved in the proposal (i.e., research only, planning only).

2. How many acres of land will be subject to a land use change under the proposal? ___NA_____

3. What is the current land use of the area subject to a land use change under the proposal? What is the current zoning and general plan designation(s) for the property? Does the current land use involve agricultural production?

   a) Current land use __Recreational/Open Space____
   b) Current zoning __ Recreational/Open Space___
   c) Current general plan designation ___Park/Open Space_____
   d) Does current use involve agricultural production? Yes____ No__X__

4. Is the land subject to a land use change in the proposal currently under a Williamson Act contract?
   Yes____ No ___X_

5. What is the proposed land use of the area subject to a land use change under the proposal? NA

6. Will the applicant acquire any land under the proposal, either in fee (purchase) or through a conservation easement? Yes_____ No __X_

   a) If you answered "yes" to 6, describe the number of acres that will be acquired and whether the acquisition will be of fee title or a conservation easement:
   b) Total number of acres to be acquired under proposal
      _____
   c) Number of acres to be acquired in fee
      _____
   d) Number of acres to be subject to conservation easement
      _____

7. For all lands subject to a land use change under the proposal, describe what entity or organization will manage the property and provide operations and maintenance services.

8. **Will the applicant require access across public or private property that the applicant does not own to accomplish the activities in the proposal? Yes__X__ No_____**

9. For land acquisitions (fee title or easements), will existing water rights be acquired? Yes_____ No__X__

10. Does the applicant propose any modifications to the water right or change in the delivery of the water?

    Yes_____ No__X__

    If "yes" to 10, please describe the modifications or changes.

PART H – SUPPORTING DOCUMENTATION

I. IMPLEMENTING ORGANIZATIONS AND INDIVIDUALS

This project will be implemented and supported by a broad partnership of organizations and individuals including Friends of Deer Creek, Natural Heritage Institute, the Bureau of Land Management, the twenty-five riparian landowners along the project site, the Nevada Irrigation District, Nevada City, the Nevada County Department of Transportation and Sanitation, and stakeholders within the CRMP process. The two main implementing organizations, Friends of Deer Creek and Natural Heritage Institute, and the principals involved in the work are described below. Friends of Deer Creek will be the fiscal agent for this project.

Joanne Hild has her Masters of Science degree in Zoology from University of Massachusetts in Amherst and her Bachelors of Science degree in Biology from Tufts University. She has been working as a River Scientist for Friends of Deer Creek since February 2000. She has coordinated the water quality and biological studies, training and using the help of 35 volunteer monitors at 15 sites along Deer Creek. Joanne is coordinating the use of the EPA's Rapid Bioassessment Procedure to sample macroinvertebrates in the creek and identify them to the family level of classification. She has developed a college class to teach volunteers about the biology of the creek and the identification techniques needed for the classification of the organisms and for the analysis of the data. She is coordinating a creek restoration project along an upstream tributary of Deer Creek. She is the Staff Advisor for the Coordinated Resource Management Group. She is currently and has been a Biology Professor at Sierra College for 15 years, teaching various general biology, anatomy and physiology, and ecology courses. Through her work with students at the college, Joanne has coordinated various research projects such as: Stream Bioassessment using macroinvertebrates to determine the health of the Yuba River, U.S. Fish and Wildlife Habitat Evaluation Procedures and vegetation studies to be used for environmental impact, ecological studies for Sierra College land use plan, local restoration projects with Nevada County Land Trust, trail guide for Nature trail at Sierra College. Joanne previously worked as a high school biology teacher for one year. She was also a research scientist with Wildlife Conservancy (mountain lions) in Sacramento and for the Bermuda Biological Station (effects of oil on coral growth and limpets) and with Cornell University (pigeon navigation).

John van der Veen graduated from UC Berkeley with a BS in Chemistry and spent 8 years working at the Institute of Marine Sciences at C Berkeley and UC Davis as an Associate Research Fellow with over 30 publications. John has taught college and high school science, worked Chevron Chemical for four years as their Chief Chemist. As part of that assignment he was responsible for all water discharge reporting for the Richmond facility, analysis of all products manufactured at the facility and developed a program of 100% ponding of all wastewater and rain run-off water for the company. The next 28 years was spent as a consultant in the field of Quality Control and Statistical Process Control (SPC) for many manufacturing processes. During this time John wrote two training manuals for implementing SPC for the manufacturing first line operators and supervisors. He worked with company engineers and scientists to perform Design Experiments to use SPC to improve quality and efficiency of the manufacturers process(es). He is currently working to use these same techniques to study and improve wastewater treatment plants. After retiring five years ago, John has spent his time to help found Friends of Deer Creek where he serves as Secretary/Treasurer. He helped write the Prop 204 grant for Friends of Deer Creek to establish a base line monitoring program, two restoration demonstration projects and a CRMP group. John works with the Deer Creek River Scientist to implement the Prop. 204 projects and serves on the TAC to assist in evaluation of two other monitoring groups data. Some of his community activities are: past Chair of the Library Committee which resulted in the voters approving a sales tax increase to fund the library; President of Common Ground Communities which builds affordable housing in Nevada County; President of

the Yuba Watershed Foundation which raises money for the Yuba Watershed Council's projects; and past President and cofounder of Music in the Mountains which produces a yearly Summer Classical Music Festival.

Stephen M. Carlton is a California registered geologist and hydrogeologist with over 22 years of experience in remedial services and water resource management. Steve obtained a B.S. in Geology from San Diego State University (1979) and a M.S. in Hydrology from University Nevada-Reno (1985). He has professional experience with the U.S. Geological Survey and three private consulting firms, most recently with GeoTrans, Inc. Steve has developed, managed, and coordinated remediation projects for soil, groundwater, and marine sediments for both public and private sector clients. Steve is the project hydrologist on two water supply project in the Sacramento Valley, to provide municipal water supply via groundwater sources. He has provided litigation support and remediation cost liability analysis for aerospace, concrete products, transportation and insurance companies. Steve has experience in alluvial and fractured bedrock aquifer systems and bay/estuary sites with salt water – fresh water interaction. Steve is currently working with a community-based group that is conducting a watershed monitoring project (Deer Creek, Nevada City, California) as well as two demonstration projects: 1. A project evaluating urban run off impacts to surface water. 2. A project restoring a portion of Little Deer Creek in Pioneer Park.

Natural Heritage Institute

The Natural Heritage Institute (NHI) is a nonprofit organization of lawyers, scientists, and economists dedicated to improving the laws and institutions that manage natural resources in the United States and globally. Since our founding in 1989, we have been a leader in crafting innovative solutions that are based on scientific investigation and economic and policy analysis. We apply a wide array of tools in pursuit of our mission: we advocate before judicial, administrative and legislative bodies; serve as technical and policy advisors to the ultimate governmental decision makers; plan and implement new resource management programs; design and apply state-of-the-science decision support systems; and represent conservation interests in complex, multi-party negotiations over the allocation of natural resources.

NHI draws on wide-ranging, interdisciplinary expertise from universities, other nonprofits, and consulting firms to augment the skills of its core staff in meeting any resource management challenge, however novel or demanding. Our current project activity includes domestic and international water management, hydropower reform, prevention of arid land degradation and desertification, habitat conservation planning for endangered species, native fisheries restoration through on-the-ground restoration measures, and legal proceedings and negotiations to increase environmental protection for at-risk species. Key accomplishments in each of our program areas are detailed on our website (www.n-h-i.org).

Elizabeth Soderstrom, Ph.D., is a water resource scientist. Dr. Soderstrom's work focuses on applying improved adaptive management approaches to aquatic restoration and river basin management, both nationally and internationally. At present, she has the technical lead role doe NHI on several activities including planning in the Guadalupe River Basin, the Yolo By-Pass, and the Rio Grande. Previously, she served for four years as the lead position in water resources management at USAID's Regional Center for Southern Africa based in Gaborone, Botswana. In this position, Dr. Soderstrom designed and managed water related activities in training, NGO capacity building, legal analysis, watershed management, and policy implementation. She represented the U.S. government's position and interests to national and regional level government agencies, to other donors, and at international meetings. She served as Steering Committee Member for: 1) the Okavango Delta Ramsar Planning Process, 2) Southern Africa Water Round Table Strategy Implementation, and 3) the Global Water Partnership's Southern Africa Visioning Process. Dr.

Soderstrom has received a Switzer Environmental Fellowship, a Switzer Environmental Leadership Grant, and a Science, Engineering and Diplomacy Fellowship from the American Association for the Advancement of Science. She received her B.S and M.S. in Biological Sciences from Stanford University and her Ph.D. in Wildlands Resource Science from UC Berkeley.

John Cain, M.L.A., is an environmental scientist who specializes in river restoration and water resources management. His recent research focused on historical geomorphic and hydrologic changes to the San Joaquin River and their implications for fisheries restoration. As a planner with the Nature Conservancy, he developed an aquatic species conservation plan for the San Joaquin Valley. He served as staff scientist for the Mono Lake Committee where he prepared evidence for the Mono Lake water rights hearings and served on the committee overseeing restoration of Rush and Lee Vining Creeks. At NHI, he is currently developing a restoration plan for the Sacramento/San Joaquin Delta. He holds an undergraduate degree in physical geography and a Masters in environmental planning from U.C. Berkeley.

James Robins, M.S., is a resource scientist who specializes in plant ecology, stream restoration, and invasive species. His research efforts include analysis of the relationship between livestock grazing and both vernal pool biota and hydrology, co-development of a model to predict riparian vegetation potential in dewatered stream reaches, and evaluation of habitat restoration potential via historical ecology. As a graduate student, Mr. Robins was involved in various research projects focused on competition between exotic-invasive flora and native flora. He received his M.S. in Rangeland Ecology from the University of California at Berkeley in 1999 and his B.A. from Vassar College in 1993.

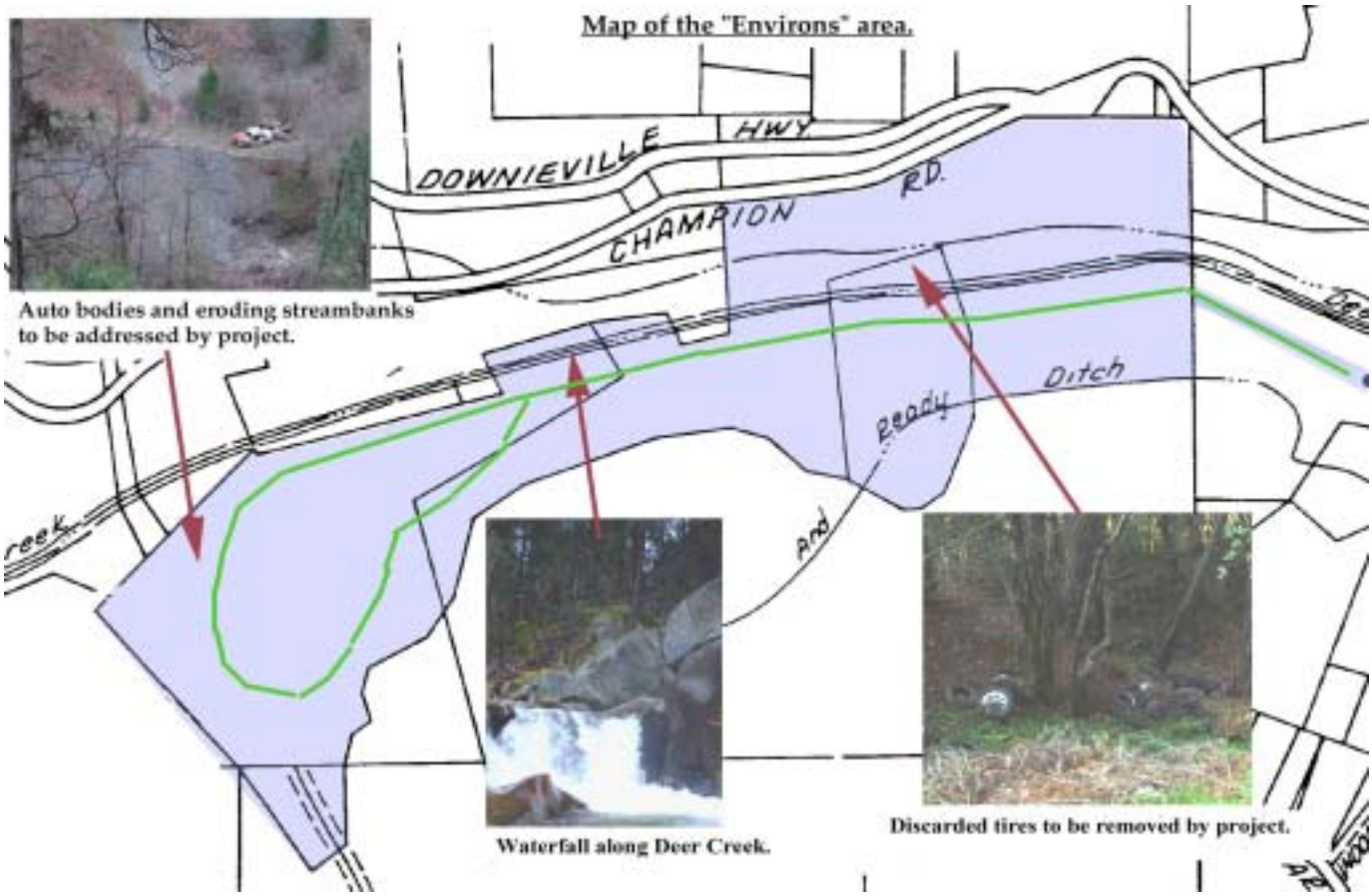
Rich Walkling, M.L.A., is an environmental planner who specializes in water resource management and environmental restoration. He has worked as a GIS analyst for the USEPA and on USAID-funded environmental health projects in Latin America. He has designed restoration plans for alluvial streams in California and for subsided islands in the Sacramento-San Joaquin delta. He recently received a Geraldine Knight-Scott fellowship to travel around the world and study human adaptations to floods. He holds B.S. in natural resources from Cornell University and an M.L.A. in environmental planning from UC Berkeley.

II. LIST OF SUPPORTING LETTERS

Natural Heritage Institute
Bureau of Land Management
Yuba Watershed Council
South Yuba River Citizens League
Deer Creek CRMP Group
Nevada Irrigation District
Nevada County: Dept.of Transportation & Sanitation
City of Nevada City
Bill & Stevie Sheatsley - Landholders
Steve Rothert – Landholder
Nina Allen – Landholder
Ruth Packard – Landholder
Mary Anne Ktreshka - Landholder
Thelma Entriken – Landholder
Steve Carlton - Landholder
Elizabeth Matson - Landholder
Laurel Reagan - Landholder
Eric Jorgensen - Landholder
Betty Fry - - Landholder

ADDITIONAL MAPS AND PHOTOS: Little Deer Creek Restoration

Other Restoration Areas



III. PROOF OF NON-PROFIT STATUS

INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date: JAN 03 2000

FRIENDS OF DEER CREEK
317 GETTYSBURG ST
NEVADA CITY, CA 95959

Employer Identification Number:
68-0429132
DLN:
17053321015009
Contact Person:
TERRI SARVIS ID# 31065
Contact Telephone Number:
(877) 829-5500
Accounting Period Ending:
December 31
Foundation Status Classification:
509(a)(1)
Advance Ruling Period Begins:
September 30, 1999
Advance Ruling Period Ends:
December 31, 2003
Addendum Applies:
No

Dear Applicant:

Based on information you supplied, and assuming your operations will be as stated in your application for recognition of exemption, we have determined you are exempt from federal income tax under section 501(a) of the Internal Revenue Code as an organization described in section 501(c)(3).

Because you are a newly created organization, we are not now making a final determination of your foundation status under section 509(a) of the Code. However, we have determined that you can reasonably expect to be a publicly supported organization described in sections 509(a)(1) and 170(b)(1)(A)(vi).

Accordingly, during an advance ruling period you will be treated as a publicly supported organization, and not as a private foundation. This advance ruling period begins and ends on the dates shown above.

Within 90 days after the end of your advance ruling period, you must send us the information needed to determine whether you have met the requirements of the applicable support test during the advance ruling period. If you establish that you have been a publicly supported organization, we will classify you as a section 509(a)(1) or 509(a)(2) organization as long as you continue to meet the requirements of the applicable support test. If you do not meet the public support requirements during the advance ruling period, we will classify you as a private foundation for future periods. Also, if we classify you as a private foundation, we will treat you as a private foundation from your beginning date for purposes of section 507(d) and 4940.

Grantors and contributors may rely on our determination that you are not a private foundation until 90 days after the end of your advance ruling period. If you send us the required information within the 90 days, grantors and contributors may continue to rely on the advance determination until we make

Letter 1045 (DO/CG)

IV. COVER OF DRAFT WATERSHED MANAGEMENT PLAN

Draft

Prepared by
Deer Creek CRMP

Deer Creek Watershed Management Plan

May, 2002

VI **City of Nevada City Letter of Support**

CITY OF NEVADA CITY

CALIFORNIA

May 31, 2002

To Whom It May Concern

The City of Nevada City is fortunate to have entered into a partnership with the Friends of Deer Creek several years ago. As such, we enthusiastically support the work they are doing to protect and enhance the waterways and tributaries that run throughout our town.

It is our understanding they are applying for funding from the Watershed Protection Program to restore Deer Creek and to continue to build partnerships to help reverse the damage done during our Gold Rush era history. We are in full support of this application and this letter will serve as authorization for Friends of Deer Creek to submit applications and appropriate paperwork, as needed, on behalf of the City of Nevada City.

If you have any questions or need further information, please don't hesitate to contact me.

Sincerely,

David McKay
Mayor

VII
LITTLE DEER CREEK ENVIRONMENTAL CHECKLIST

Initial Environmental Study

Naturalization Project *for*
Little Deer Creek
Pioneer Park, Nevada City

Environmental Checklist Form

1. Project title: Naturalization Project for Little Deer Creek
2. Lead agency name and address: City of Nevada City, 317 Broad Street, Nevada City
3. Contact person and phone number: Laura Oberholtzer (530) 265-2496
4. Project location: Pioneer Park, Nevada City, near Park Street Extension
5. Project sponsor's name and address: Same as lead agency
6. General Plan designation: Public 7. Zoning: Public
8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

Naturalization of Little Deer Creek as it flows through Pioneer Park to include removal of small bridge and concrete channelization features, increase channel width and bed meander to increase flow capacity and decrease flow velocity, additional bank stabilization and native vegetation, reduce levee height, and install sediment traps in adjacent parking lot.

9. Surrounding land uses and setting: (Briefly describe the project's surroundings)

The project area itself is surrounded completely by Pioneer Park. Nearby uses adjacent to the park are single family residential.

10. Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement.)

Streambed Alteration Permit, Ca. Dept. of Fish and Game

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- ☐ Land Use and Planning
- ☐ Population and Housing
- ☐ Geological Problems
- ☑ Water
- ☐ Air Quality
- ☐ Transportation/ Circulation
- ☐ Biological Resources
- ☐ Energy and Mineral Resources
- ☑ Hazards
- ☐ Noise
- ☐ Mandatory Findings of Significance
- ☐ Public Services
- ☐ Utilities and Service Systems
- ☐ Aesthetics
- ☑ Cultural Resources
- ☑ Recreation

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☑ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. If the effect is a "potentially significant impact" or "potentially significant unless mitigated," an ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

Signature: [signature] Date: May 31, 2005

Printed name: Laurie Oberholtzer, Consultant For: City of Nevada City